

ABSTRACT OF THE DISCLOSURE

First and second resistors are given a common length
L and arranged to have a constant equal resistance per unit
length. A plurality of switch elements are made conductive
5 between the resistors. A predetermined constant voltage
V1 is applied to one terminal of the resistor through a
wiring. The voltage value AD1 at the other terminal of the
resistor is detected by a processing unit through a wiring.
The voltage value AD2 at one terminal of the resistor is
10 detected by the processing unit through a wiring. The
other terminal of the resistor is connected with the ground
through a wiring. On the basis of the voltage values AD1
and AD2 detected, the operating states of the individual
switch elements are detected by the processing unit.